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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/606,237

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Yoshiaki Suzuki

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EXAMINER

EDWARDS, LAURA ESTELLE

ART UNIT

PAPER NUMBER

1734

MAIL DATE

DELIVERY MODE

05/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/606,237

Applicant(s)

SUZUKI ET AL.

Examiner

Laura Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006 and 08 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,15,16,50 and 51 is/are pending in the application.
- 4a) Of the above claim(s) 50 and 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4, 6, 7, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lakes (US 4,226,886) in view of Hansen (US 3,971,315).

Lakes teaches a liquid transfer device comprising a liquid transfer member (74) having a transfer surface, the liquid transfer member including a liquid accumulating portion (24) accumulating the liquid; and a restricting portion (22) formed from a porous film formed with fine pores, supplying the liquid in said liquid accumulating portion to said transfer surface with restriction, the porous film having a thickness (i.e., depth) 10 to 200 microns (col. 5, lines 3-11) and pore diameter range of about 2 microns (col. 3, lines 16-27 and col. 4, lines 50-56) wherein the liquid in the liquid accumulating portion is supplied to the printed product through the porous film by a depression force (see for example, Fig. 7). Lakes fails to teach or suggest the microporous restricting portion or film layer having a pore diameter in the range of 0.1 to 1 microns. However, it was known in the art, at the time the invention was made to provide a microporous portion or film layer in a liquid transfer device to be in the range of at least 0.5 microns in order to allow for some fluid flow but yet prevent substantial "bleed out" of the fluid as evidenced by Hansen (col. 4, lines 62 to col. 5, line 5). It would have been obvious to one of ordinary skill in the art to provide the microporous restricting portion or film layer of Lakes to be of a pore diameter of at least 0.5 microns as taught by Hansen, in order to allow for some fluid flow through the restricting portion but prevent substantial "bleed out" of the fluid. Applicants

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should note that the liquid as recited initially in the preamble of the claim and then referred to in the body of the claim has been merely read as being intended to be used with the device.

With respect to a holding member, the liquid transfer member can be mounted on a shaft or rod to form a roller as shown in Fig. 5 of Lakes.

With respect to claim 4, neither Lakes nor Hansen disclose uniformity in density of the liquid accumulating portion. However, because Lakes illustrates the liquid accumulating portion being formed from a polymeric composition compressed into a sheet or layer of uniform thickness (See Fig. 2; col. 7, lines 38-43), one of ordinary skill in the art would expect that the liquid accumulating portion or layer to be of a uniform density.

With respect to claims 6/7, the device as defined by the combination above would meet said different density limitation because Lakes recognizes that the polymeric composition can be extruded as two or more layers with different void volumes or channels (see col. 7, lines 13-17). Therefore, one of ordinary skill in the art would readily appreciate the liquid accumulating portion resulting from a multilayered sheet of different void volumes and or channel sizes to result in a sheet having different or varying density in thickness.

With respect to claim 9, this claim has been given no patentable weight because the established relationship, between the accumulating portion, film, and product intended to be used with the apparatus, does not constitute a structural limitation.

With respect to claim 15, the liquid transfer member of the device defined by the combination above is construed to be a multilayered deformable film or sheet product that when placed on a shaft or rod to contact another surface can take the form of said surface even when said another surface is curved.

Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lakes (US 4,226,886) and Hansen (US 3,971,315) as applied to claims 1, 3, 4, 6, 7, 9, and 15 above and further in view of Lofgren (US 3,326,180).

The teachings of Lakes and Hansen have been mentioned above and while Lakes recognizes placement of the device in holders commonly used in the industry (col. 10, lines 53-56), neither Lakes nor Hansen teach or suggest the holding member being in the form of a receptacle member with a surface supporting frame. However, it was known in the art, at the time the invention was made, to contain a multilayered pad product in a receptacle member for holding the supply fluid with a surface supporting frame or edge around the receptacle member in order to dispense or meter the supply fluid therefrom as evidenced by Lofgren (see Fig. 1, col. 2, lines 8-28). It would have been obvious to one of ordinary skill in the art to provide a receptacle type holding member as taught by Lofgren to enclose or encase the liquid transfer member in the device defined by the combination above in order to dispense or meter the supply fluid to another surface such as in the use of the transfer member as a self metering pad.

Claims 8, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lakes (US 4,226,886) and Hansen (US 3,971,315) as applied to claims 1, 3, 4, 6, 7, 9, and 15 above and further in view of Terry (US 5,213,751).

The teachings of Lakes and Hansen have been mentioned above but neither teach or suggest the liquid accumulating portion being formed of laminated sheets of different densities. However, it was known in the art, at the time the invention was made, to form a multilayered pad product including a liquid accumulating portion via the lamination of sheets of different

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materials (including polymer and adhesive) as evidenced by Terry (col. 3, lines 28 to col. 4, line 23). In light of the teachings of Terry, one of ordinary skill in the art would readily appreciate the liquid accumulating portion of the device defined by the combination above to be alternatively formed by lamination of at least one polymeric sheet layer adjacent an adhesive layer to result in a multilayered sheet of different materials and therefore different densities.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lakes (US 4,226,886) and Hansen (US 3,971,315) as applied to claims 1, 3, 4, 6, 7, 9, and 15 above and further in view of Kent (US 3,009,440).

The teachings of Lakes and Hansen have been previously mentioned but neither teach nor suggest the liquid accumulating portion having stripe form grooves on a bottom surface thereof. However, it was known in the art, at the time the invention was made, to form a multilayered pad product including a liquid accumulating portion having stripe form grooves on a bottom surface thereof to allow for penetration of fluid into the pad product as evidenced by Kent (col. 2, lines 13-19). It would have been obvious to one of ordinary skill in the art to provide grooves as taught by Kent on the bottom surface of the liquid accumulating portion of the device defined by the combination above in order to facilitate penetration of fluid into the pad product.

Response to Arguments

Applicants' arguments filed 12/28/06 and 3/8/07 have been fully considered but they are not persuasive.

Applicants contend that method claims 50 and 51 should be rejoined with the apparatus claims 1, 3-13, 15, and 16. This request for rejoinder is inapplicable in this instance as the restriction requirement as originally applied in the office action as of 3/22/06 is based on method and apparatus claims not product and process claims. As such the request for rejoinder has been denied.

Applicants contend that Lakes is directed to a stamp pad but not one for use in transferring liquid, that is liquid being at least one selected from a group consisting of pentaerythritol, silicon oil, modified silicon and fluorinated oil for enhancing durability of an image on a printed surface of a printed product printed with ink. This argument is not deemed persuasive in that the apparatus of Lakes is to a liquid transfer member substantially equivalent in structure to the instantly claimed invention with the exception of the new pore diameter being 1 micron or less. However, the teachings of Hansen have been supplied to supplement the teachings of Lakes such that the claimed invention as amended would still be obvious in view of the cited prior art. As for the type of liquid intended to be used in the transfer member, namely pentaerythritol, silicon oil, etc., the apparatus as claimed has not been read to include a positive source or supply of liquid in communication with the liquid transfer member because the liquid is first recited in the preamble of the claim and not the body of the claim. Regardless, the closest language in the claim body suggesting that liquid is accumulated or collected so as to build up is with respect to the liquid accumulating portion. However, because such language suggests that the liquid has to be collected or built up would suggest that liquid would have to be added to that portion to build up over a predetermined period of time as oppose to the language suggesting that the transfer member includes the portions with the liquid instantly therein. As for the intended

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use of the apparatus to enhancing durability of an image on a printed surface of a printed product, this has been given no patentable weight because the limitation adds no further structure to the apparatus. The apparatus as claimed remains unpatentable for reasons previously set forth.

Applicants contend that Lakes does not disclose the instantly claimed pore range, the smallest size of the pore in Lakes is 2 microns which is greater than the range of pore diameter (0.1-1 microns) as recited [claim 1]. This argument is deemed moot in light of the teachings to Hansen (col. 4, lines 62 to col. 5, line 5) which suggests such a pore diameter to prevent substantial "bleed out" of the fluid.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Laura Edwards
Primary Examiner
Art Unit 1734

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May 11, 2007